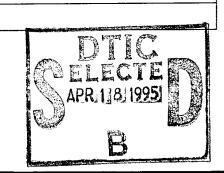
REPORT DOCUMENTATION PAGE

	REPOR	1 DOCOMENTATION PAGE	
1. Report Security Classification: UNCLASSIFIED			
2. Security Classifica	tion Authority:		
3. Declassification/Dov			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: Joint Military Operations Department			
6. Office Symbol: 1C 7.		7. Address: Naval War College, 686 Cushing Rd., Newport, RI 02841-5010	
	y Classification): The Lo	ogistics Civil Augmentation assified).	Program - A Diamond in the
9. Personal Authors: Major Camille Nichols, USA			
10.Type of Report: Final		11. Date of Report: 13 February 1995	
12.Page Count: 22			
satisfaction of the : The contents of this	requirements of the Jo paper reflect my own	to the Faculty of the Nava oint Military Operations Dep personal views and are not Department of the Navy.	partment.
Contingency, Continge	relate to your paper: ency Contracting, Log bat Support, Contract	Logistics, LOGCAP, Civilian istics Civil Augmentation Padministration	n Contractors, rogram, Logistics Support,
15.Abstract: This paper reveals to the Joint Task Force Commander (JTFC) that the Logistics Civil Augmentation Program (LOGCAP) is an essential tool needed to conduct successful MOOTW. The ability of the operational commander to provide operational logistics for his forces involved in MOOTW has proven to be a critical factor in the success of these missions. Current fiscal, political and force structure policies limit the availability of military logistics assets for the JTFC's mission. This shortage of critical assets can be overcome by using the civilian contractor support provided in LOGCAP. The background of LOGCAP is presented. This includes the development of the concept, the regulatory guidance, and the use of the program prior to 1992. The current focus of the program, the program administration, and the contract details are provided so the combatant commander can understand how to use the program for his operations. Examples of LOGCAP support in recent Military Operations Other Than War highlight the value of this program for each operational commander. Civilian contractors are an essential element of our ability to provide the logistical support and sustainment needed for military operations required to execute our National Security Strategy.			
16.Distribution / Availability of Abstract: UNLIMITED	Unclassified	Same As Rpt X	DTIC Users
18.Abstract Security Classification: UNCLASSIFIED			
19.Name of Responsible Individual: Chairman, Joint Military Operations Department			

Security Classification of This Page <u>UNCLASSIFIED</u>

21.Office Symbol: 1C

20.Telephone: (401) 841-3414/4120



NAVAL WAR COLLEGE Newport, Rhode Island

The Logistics Civil Augmentation Program - A Diamond in the Rough for Operations Other Than War.

by

CAMILLE M. NICHOLS Major, US Army

A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: Camill Miles

16 June 1995

Paper directed by Captain D. Watson Chairman, Joint Military Operations Department

Faculty Advisor

Date

19950417 113

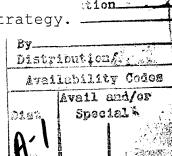
A CONTRACTOR OF THE PROPERTY S

Abstract of

The Logistics Civil Augmentation Program - A Diamond in the Rough for Operations Other Than War.

This paper reveals to the Joint Task Force Commander (JTFC) that the Logistics Civil Augmentation Program is an essential logistics tool needed to conduct successful MOOTW. The ability of the operational commander to provide operational logistics for his forces involved in MOOTW has proven to be a critical factor in the success of these missions. Current fiscal, political and force structure policies limit the availability of military logistics assets for the JTFC's mission. This shortage of critical assets can be overcome by using the civilian contractor support provided in the Logistics Civil Augmentation Program (LOGCAP).

The background of LOGCAP is presented. This includes the development of the concept, the regulatory guidance, and the use of the program prior to 1992. The current focus of the program, the program administration, and the contract details are provided so the combatant commander can understand how to use the program for his operations. Examples of LOGCAP support in recent MOOTW operations highlight the value of this program for each operational commander. Civilian contractors are an essential element of our ability to provide the logistical support and sustainment needed for military operations required to execute our National Security Strategy.



1 For

1&I

ne**d**

INTRODUCTION

The strategic landscape has dramatically changed since the demise of the bipolar world; this has translated into changes in the operational landscape as well. Operational commanders today are faced with reductions in forward-assigned units, a shift in mission focus to regional orientation, and a much broader range of conflicts and crises. The current National Military Strategy places more responsibility on these commanders to plan and execute missions in their area of responsibility. These missions will most likely not be wars; rather, they will be classified as military operations other than war (MOOTW). This distinction brings with it a myriad of differences in how our current military capabilities will be employed. The discussion that follows will focus on the operational support capability available for MOOTW.

Specifically, this paper will show the Joint Task Force

Commander (JTFC) that the Logistics Civil Augmentation Program
is an essential logistics tool needed to conduct successful

MOOTW. The ability of the operational commander to provide

operational logistics for his forces involved in MOOTW has

proven to be a critical factor in the success of these

missions. Current fiscal, political and force structure

Italicized words are defined on page 17.

policies limit the availability of military logistics assets for the JTFC's mission. This shortage of critical assets can be overcome by using the civilian contractor support planned ford in the Logistics Civil Augmentation Program (LOGCAP).

An operational commander must understand all of the tools at his disposal to execute his mission. The CINC and JTFC will determine which assets will be utilized in any military operation. In order to develop the proper logistics support plan for a MOOTW, these commanders must have an understanding of what LOGCAP is, what advantages it has over traditional contingency contracting methods, how it has been used in recent MOOTWs, and why it may be their best means of augmenting logistics support in future military contingencies. The history of the LOGCAP concept, an overview of the current contract, and highlights of how LOGCAP has been used are presented. This is followed by a discussion of the program's problems, advantages and disadvantages over other logistic support methods, and the program's value to future military operations other than war.

This paper focuses on the operational level of military operations. Therefore, this paper is not going to debate what the proper military force structure should contain. Nor, is this paper going to discuss the validity of LOGCAP during periods of war. Both of these issues are complex and involve decision and policy making at the national strategic level.

Those things need to be debated; but, the central issue presented here is how best to logistically support the most likely scenario the combatant commander will face.

LOGCAP BACKGROUND

The use of civilian contractors to supply logistics support during periods of armed conflict is not new. They were used during the Napoleonic Wars, the American Revolutionary War, the Civil War, both World Wars, and the Korean War. But, it was the decision not to call up the reserve forces and the consequential reliance on the use of civilian contractor support during the Vietnam War that led Army logisticians to see the need for a preplanned methodology to use civilians in the future. The Army formalized this concept in 1985 in Army Regulation 700-137, Logistics Civil Augmentation Program. "The LOGCAP objective is to preplan for the use of civilian contractors to perform selected services in wartime to augment Army forces."²

The Army is doctrinally responsible for logistics support to joint operations 60 days after they begin and must develop the plans and force structure to accomplish this. The need for LOGCAP grew from the realization that the Army might not be able to fulfill its responsibilities and thus be incapable of supporting certain contingency operations. Since most of the Army's Combat Service and Combat Service Support assets were in the Reserves, the Army was vulnerable to not being

able to deploy needed support if the President did not allow a Reserve call-up, as was the case in Vietnam. The Army in the mid-1980s found itself with a declining budget, and a force structure mix ratio that could not provide the required support capability for some operational plans. LOGCAP became a means to address this shortfall. The total Army analyses (TAA) conducted during this period reflected the logistic unit shortages as COMPO 4; they also identified COMPO 9 units where civilian contractors would be employed to meet logistic requirements³. To acquire these COMPO 9 assets, the regulation tasked each Major Army Command to work with their CINC and establish LOGCAP contracts with civilian contractors to support the identified TAA shortfalls in their area of responsibility.

Very little was done with LOGCAP until 1992. It was during Operations DESERT SHIELD and DESERT STORM that it became even more evident that the U.S. military was dependent on civilian contractors to support and perform its missions. LTG Pagonis, Central Command's senior operational logistician, made the following statement while discussing the shortfalls and challenges of the logistics system: "It has been and will continue to be necessary to rely upon the private sector for support that we should have in house." The war validated the need for preplanned availability of civilian support. This realization coupled with the force drawdown, the declining

military budget, the new uncertain world order, and the increasing likelihood of operations other than war, motivated the Army logisticians to get a civilian contractor into LOGCAP. In keeping with the mandate to be a power projection force, LOGCAP was revised to use a single, worldwide contract to preplan for theater facilities and logistics services for any contingency or war⁵. The U.S. Army Corps of Engineers (USACE) was given program management authority and responsibility to award and administer the contract for the Army. The operational commanders could now come to the Army Logistics Staff to use the LOGCAP contractor when needed for any contingency in their area of responsibility (AOR).

CONTRACT DETAILS

Brown and Root Services Corporation was awarded the LOGCAP contract by USACE on 3 August 1992. This is a costplus-award fee contract with one base year and four option years. The contract, which has been structured for easy modification, can best be viewed as an "umbrella" contract for studies and logistic support plans. The base contract funds a small contractor staff to perform studies and conduct logistics planning and training with the CINC's staffs. A decision to use the contractor for a contingency will be treated as an option to the base contract and must be funded by the requiring CINC prior to the mobilization of the contractor's assets. The notional support package that the

contractor has been asked to plan to execute in an AOR is to provide construction, facility, and general logistics support services to a force of 20,000 for up to 180 days. The contractor plan assumes no government equipment will be furnished and no government Airlift or Sealift will be available for movement of the contractor's required assets into the AOR. The contract mechanism is flexible enough that it may be tailored to meet any CINC's support requirements in any type of contingency. There are several options available for employment of the contractor: exercise support, forward support, sustainment, redeployment, residual forces support, prepositioning, and civil assistance. The current LOGCAP concept provides the flexibility for U.S. forces to respond to short notice military contingency operations anywhere in the world to support a combatant commander.

LOGCAP UTILIZATION

Brown and Root had barely gotten up and running before a contingency arose that would require the use of the contractor's services. President Bush's announcement on 4 December 1992 that U.S. troops would be sent to Somalia supplied the perfect scenario to employ LOGCAP for the first time. Central Command's (CENTCOM) plan for Operation RESTORE HOPE was to send the U.S. Marine Corps to secure the port and establish a base of operations, and then have Army units conduct the humanitarian relief operations. The Navy Facilities

Engineering Command (NAVFAC), responsible for providing construction and facility support in East Africa, became responsible for supporting the Marine Corps logistical requirements. NAVFAC knew this area was very austere and lacked the infrastructure to support a base camp. They also knew that logistical support was needed immediately, and they were very aware of the political desire to minimize the presence of U.S. troops. Their best hope to support the Marines and this humanitarian mission was to get civilian contractor support into the theater; so, they asked the Army to mobilize the LOGCAP contractor.

The contractor's responsiveness was remarkable given the fact that no prior planning had been done for this area. The contractor had personnel on the ground in Somalia one day after the U.S. Marines landed. LOGCAP supported U.S. troops until May 1993, and then was used to fulfill the United States' obligation to support the United Nations (UN) during Operation CONTINUE HOPE. LOGCAP missions included: base camp construction, maintenance, and repair; food supply and service; laundry, field showers and latrines; generator servicing and power production; water production and distribution; porta-toilet servicing; solid waste management; bulk petroleum handling; transportation; and linguist support. The U.S. committed \$104.3M to the LOGCAP contract; \$62.8M for U.S. forces and the rest for the UN support which ended in

March 1994. Based on the contractor's performance and the difficult environment, the UN awarded their own contract to Brown and Root for facility and logistics services support.

The contractor has received numerous accolades, to include one from the Chairman of the Joint Chiefs of Staff, for their performance during this MOOTW. The JTFC and the CENTCOM staff believe their mission was successful because LOGCAP allowed them to have the ability to support this power projection contingency operation. Even though there were problems with the mechanics of the contract, the concept for LOGCAP was validated.

Problems were experienced on both the contractor's side and the military's side. The military's problems were centered on the execution, administration and responsibility for the program and the contract. Finding funds to obligate against the contract was the biggest problem; it became so critical that the contractor had started to demobilize during the transition to UN support. Contractor problems encountered in Somalia, for the most part, were minor and could be expected when operating in this type of environment and utilizing the LOGCAP contract for the first time. However, systemic problems with LOGCAP have been discovered in the operations it has been used; these problems will be addressed later in the paper.

The LOGCAP contractor was also employed to support Operation SUPPORT HOPE in Rwanda. This humanitarian support mission was another short notice MOOTW. The contractor conducted operations for the production, distribution, and storage of potable water. This contractor effort complemented a small number of military soldiers; it ran from July to September 1994, and cost the Army \$6.4M.

The planning for Operation UPHOLD DEMOCRACY in Haiti had been going on for a long time at Atlantic Command (ATCOM), and LOGCAP was included almost from the beginning. The contractor was mobilized in September 1994 to support both U.S. and Multi-National forces. As of October 1994, \$96M had been committed to the contract for FY95. The LOGCAP contractor is currently constructing base camps, and electrifying buildings. They are providing base camp operations, laundry operations, food service operations, maintenance operations, transportation services, road main-tenance, and some other unit supply functions. The contractor is also prepared to conduct guard services, medical services, and airfield repair. Their mission in Haiti is closer to the notional support package envisioned when USACE awarded the base contract in 1992.

President Clinton made the decision to send forces back to Saudi Arabia to counter Iraq's new threat. Operation VIGILANT WARRIOR, which is still on-going, started in October 1994. LOGCAP is being used to support U.S. forces in Saudi

Arabia and Kuwait. The contractor was mobilized in October and is supplying food service operations, transportation services for line haul and troop transport, laundry service, and material handling services. One of CENTCOM's goals is to minimize the number of troops involved in this mission which, may mean an even larger role for the contractor9.

Discussions are being conducted on possibly using LOGCAP to run evacuation and redeployment operations in support of UN forces in Bosnia¹⁰. There is also a high probability that the running of the refugee camps in Cuba will be turned over to the LOGCAP contractor. The concept to use civilian contractors to support in operations other than war has both political and military benefits that we are only beginning to realize.

LOGCAP PROBLEMS AND ALTERNATIVES

Major problems do exist in this program. However, they are not insurmountable, and some efforts have already begun to eradicate some of the problems. The single most pressing problem is how to fund the contractor's work during a contingency. The Secretary of Defense's efforts to get an item in the budget for contingency operations will help; but, the CINC's must put LOGCAP in their budget. The program is expensive, and there is not yet an effective way to evaluate the costs of the program versus the benefits to the operations. The risk to the contractor is the other major problem with the

program that directly impacts the JTFC's decision to use LOGCAP. A warlike climate may require protecting the contractor and may affect the contractor's ability to perform in a hostile environment. The regulation plans for the use of the civilian contractor during wartime as well as during peace operations. The JTFC must evaluate his operation with respect to the risks to the civilians and the military operation if security forces have to be supplied to the contractor's operations. If the potential exits for a hostile environment, then LOGCAP may not be appropriate and it may be less risky to use military logistic forces.

The overall management structure of the program is confusing. The regulation governing LOGCAP is very out of date in relation to who is in charge of the program, and how the program is being implemented with a single contractor. The Army is currently rewriting the regulation and is planning to give management of the program to the Army Material Command¹¹, the same agency working on the Joint Logistics Command concept. Execution and administration of the program in the area of operations is also confusing. Training programs need to be developed for the contingency contracting officers, the contracting administrators from the Defense Logistics Agency and for the JTFC and his logistics staff. This training must focus on how this contract should be implemented, how task orders should be written, how the

contractor is evaluated for his award fee determination, how to get the most out of the resources the contractor brings to the operation, and how to incentivise the contractor to keep costs down.

Alternative logistic support options, in light of LOGCAP's problems, should be reviewed. The most traditional choice would be to deploy military Combat Service Support units (most probably located in the reserves). Reserve units do have the capability to furnish the support required and perform their functions well when deployed as evidenced during the Gulf War. The costs for equipment and the unit's training is already included in the military budget. However, funds to mobilize a reserve unit for an operation do not exist and would have to be reprogrammed as they have for LOGCAP in the MOOTWs discussed here. Deployment of a Reserve unit would compete with combat units for strategic lift. The LOGCAP contractor would not compete for strategic lift; although, strategic lift could be allocated to the contractor on an exception basis for expediency or cost savings. An expansion of Host Nation Support through treaties and agreements is another alternative. However, relying on a third world country with a limited infrastructure is not always an acceptable solution and would not have worked in Somalia, Rwanda, nor Haiti. The last viable alternative is to set up a centralized office of contingency contracting officers as was

done in the Gulf War. This office of contracting officers receives the requirements from the units, prioritizes them, and then contracts directly with the local merchants to obtain the support required¹². This works in an environment that has a mature infrastructure and an almost unlimited amount of sources and materials. However, in a depressed economy with limited sources, contracting officers unfamiliar with the region would have difficulties in providing the supplies necessary to support the operation.

These alternative logistics support methods have limitations especially in the number of personnel and units that can perform these types of support activities and the avail-ability of the assets. This does not mean that LOGCAP must be the solution. LOGCAP is not a panacea for every contingency, but it does offer an operational commander another support capability that can benefit most MOOTW scenarios. It is readily available for worldwide response and it may only be limited by the amount of money available.

The most effective advantage LOGCAP offers over all other means of support capability is the flexibility it offers the combatant commander. The JTFC is able to tap into the contractor's full range of global corporate assets almost instantly. The commander does not have to worry about getting the President to conduct a reserve call-up, or the time delay

(10-30 days) needed to deploy a reserve unit for an operation. The commander does not have to worry about the unit's equipment status or the unit's readiness or how to get the unit into the AOR. The commander just has to have a clear statement of work and the funds to purchase the support he needs. The use of the civilian contractor will enhance the regional and country studies that the CINCs perform, and can provide an alternative to U.S. force commitment as was done in Operation CONTINUE HOPE. LOGCAP supports the principles for Joint Operations Other Than War13; specifically, unity of effort, restraint, legitimacy and perseverance. The use of the civilian contractor over military units in MOOTW has both political and fiscal advantages. A CINC is faced with problems such as the down-sizing of the military force structure, the unit readiness posture, and the diminution of public support for military involvement in MOOTW. The use of LOGCAP eradicates these drains on his ability to respond to contingencies. Thus, LOGCAP is logistics alternative as well as a logistics multiplier.

CONCLUSION

Our National Security Strategy clearly lays out that the military will be engaged in operations other than war.

President Clinton states "...in an integrating and interdependent world, we simply cannot be successful in advancing our interests - political, military and economic - without

active engagement in world affairs."14 This active engagement will most likely include peacekeeping, promoting democracy, and humanitarian assistance as evidenced by our actions in Somalia, Rwanda, Haiti, Kuwait 1994, and Cuba. Operations such as these require more support force capabilities than combat capabilities 15. Unfortunately, most of that support force exits only on paper (COMPO 4) or in our Reserve forces and may not always be readily deployable to support the kind of short notice contingencies with which we are being faced. Our force structure mix, and the political and fiscal constraints placed on the military limit the military's ability to execute our National Security Strategy. However, the CINCs can meet the demands for support capability by utilizing LOGCAP and relying on civilian contractor's to furnish the logistic assets needed. As stated in a lessons learned report on Operation RESTORE HOPE, "LOGCAP can be a force multiplier in support of contingency deployments, especially in countries where the U.S. does not maintain a continuing presence."16 Civilian support has proven itself admirably in war, and it has performed just as well in the non-war operations described earlier.

The LOGCAP is truly a diamond in the rough. It offers the operational commander the key to solving logistical support and sustainment problems in MOOTW. The hard work -- the contract solicitation process, contractor selection,

contract award and initial funding -- have already been done. All the operational commanders have to do is tell the Army they want to use the program and civilian contractor support can begin almost immediately. The JTFC, in order to utilize this program most effectively, must understand the program's intent, the contract mechanism, the funding, and the planning requirements. This effort has attempted to supply information to operational commanders about LOGCAP. The program has existed on paper for ten years, but it has only recently been utilized. CINCs need to check their Operations Plans and analyze their area of responsibility; there are things you will be expected to do that you cannot do anymore without the use of this program. We contract for civilian support for Airlift and Sealift, this program gives us "Supportlift" and buys the military a mobile base of operations. LOGCAP should be included in your plans, training programs and budgets. The use of civilian contractors may be the only way we achieve all of the National Security objectives and missions the military is assigned.

DEFINITIONS

Contingency - an emergency involving military forces caused by Natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid response, and special procedures to ensure the safety and readiness of equipment. (Joint Pub 1-02)

Contingency Contracting - contracting performed in support of a peacetime contingency in an overseas location pursuant to the policies and procedures of the Federal Acquisition System. (Joint Pub 1-02)

COMPO 4 - the support force component designation for unmanned and unequipped requirements in the total Army analysis (TAA). This represents forces that are required to support current operations plans, warfighting scenarios, and force allocation rules. It represents the shortfall of units that are needed to accomplish the missions outlined. These units do not exist, but will show up on the CINC's required troop lists in support of an operational plan. (Fortner p.13)

COMPO 9 - the support force component designation in the total Army analysis (TAA) for logistics civil augmentation program offsets, Host Nation Support commercial assets contractually obligated to support U.S. forces. This category has been existence since 1985. It represents the use of civilian contractors to perform support functions and it replaces COMPO 4 units on troop lists. (Fortner p. 13,14)

Force Structure Mix Ratio - force structure mix is the combination of types of forces in a military service. The categories of forces are combat, combat support (CS) and combat service support (CSS). The force structure mix ratio is the number of combat forces to the number of supporting forces (CS and CSS); often called the "tooth to tail ratio." (JP 4-0)

Military Operations Other Than War (MOOTW) - a wide range of activities where the military instrument of national power is used for purposes other than the large-scale combat operations usually associated with war. It includes the following activities: arms control; combating terrorism; support to counterdrug operations; security assistance; foreign internal defense; noncombatant evacuation operations; humanitarian assistance; peace enforcement; peacekeeping; and peace building. (JP 3-0)

Operational Commander - the operational level of war is generally the purview of the commander in chief or combatant commander of the theater of operations. Because the CINC is also responsible for theater strategy, the ground component commander and the joint task force commander are also operational commanders. (Joint Pub 3-0)

Operational Logistics - those activities required to sustain campaigns and major operations within a theater. It focuses on establishing and maintaining lines of communications and sustaining the force in the theater of operation.

NOTES

- ¹ Joint Chiefs of Staff, <u>National Military Strategy 1992</u>, pp. 11-13.
- Program (LOGCAP), Army Regulation 100-137 (Washington: U.S. Department of the Army, 16 December 1985), p. 3.
- ³Joe A. Fortner, "Force Structuring for Combat Service Support," Army Logistician, January-February 1989, p. 12.
- ⁴Lieutenant General W. Pagonis, "Observations on Gulf War Logistics," Army Logistician, September-October, p. 10.
- ⁵U.S. Army Corps of Engineers, "LOGCAP Briefing," Washington: 1994.
- ⁶ Interview with Major Mike Bowman, Department of the Army, Office of the Deputy Chief of Staff for Logistics: 9 December 1994.
- ⁷Telephone conversation with Lieutenant Colonel Gordon Kennedy, Joint Chiefs of Staff, Washington, DC. 30 November 1994.
- ⁸U.S. Atlantic Command, "LOGCAP Overview Brief," briefing on LOGCAP usage in Haiti, Norfolk, VA: 1994.
- ⁹Telephone conversation with Lieutenant Colonel Steve Nash, U.S. Army Corps of Engineers, Washington, DC. 5 December 1994.

- Telephone conversation with Lieutenant Colonel Chris Paparone, Defense Logistics Agency, Alexandria, Virginia. 30 November 1994.
- 12 Lieutenant Colonel David Clagett Jr, "Logistics Support to Future Unified Commanders," Unpublished Research Paper, U.S. Army War College, Carlisle, PA: 1993, p. 12-15.
- Operations, Joint Publication 3-0, Washington: Joint Chiefs of Staff, 9 September 1993, pp. V2-V4.

¹⁰Bowman.

of Engagement and Enlargement, July 1994 (The White House: U.S. Govt Print. Off.), p. 29.

Draft Field Manual 100-16, Washington: U.S. Department of the Army, 1993, p. 6.

Hope Lessons Learned Report, Fort Leavenworth, KS: Center For Army Lessons Learned, 1993, p. XI-19.

BIBLIOGRAPHY

- Almos, William. "The Aftermath of War: Clearing Up the Contracting Battlefield," Contract Management, 1 February 1992, pp. 25-29.
- Bethany, Captain David A. and Captain Michael Miller.
 "Development of the Air Force Contingency Contracting
 Course Framework." Unpublished Masters Thesis, Air Force
 Institute of Technology, WPAFB, Ohio: 1993.
- Bronson, John D. <u>Southwest Asia Logistics Civil Augmentation</u>

 <u>Program Estimate (SWALE), 1987-1991.</u> Bethesda, MD: Army

 <u>Concepts Analysis Agency, 1985.</u>
- Campbell, Kelly N. "Contingency Contracting Officers: Can They Adequately Support the Force?" Unpublished Masters Thesis, Naval Post Graduate School, Santa Monica, CA: 1993.
- Clagett, David Jr. Lieutenant Colonel. "Logistics Support to Future Unified Commanders." Unpublished Research Paper, U.S. Army War College, Carlisle, PA: 1993.
- Clinton, William President. A National Security Strategy of Engagement and Enlargement, July 1994. The White House: U.S. Govt Print. Off. 1994.
- Clow, K. Colonel. "The Logistics Civil Augmentation Program: Status Report." Unpublished Research Paper, U.S. Army War College, Carlisle, PA: 1993.
- Ferguson, Warner. "Should a Joint Logistics Command Be Developed To Support Contingency Operations?" Unpublished Research Paper, U.S. Army War College, Carlisle, PA: 1992.
- Fortner, Joe A. "Force Structuring for Combat Service Support." Army Logistician, January-February 1989, pp. 12-15.
- Gilliatt, P.S. Contingency Contracting Smart Book. Fort Lee, VA: Army Procurement Research Office, 1987.
- Gregory, William Major. "Opening Pandora's Box: The U.S. Army in Combined Contingency Operations." Unpublished Research Paper, U.S. Army Command and General Staff College, School of Advanced Military Studies, Fort Leavenworth, KS: 1989.

Interview with Major Mike Bowman, Department of the Army, Office of the Deputy Chief of Staff for Logistics: 9
December 1994.

• , • •

- Kimmit, Mark Major. "Decision Making In Contingency Operations: Different Conflicts, Different Challenges."
 Unpublished Research Paper, U.S. Army Command and General Staff College, School of Advanced Military Studies, Fort Leavenworth, KS: 1989.
- Lowe, Charles M. Jr. Army Contingency Contracting. Ft Lee, VA: Army Procurement Research Office, 1985.
- Mason, Robert L. "Contingency Contracting During Low-Intensity Conflicts." Unpublished Masters Thesis Air Force Institute of Technology, WPAFB, Ohio: 1988.
- Pagonis, W. Lieutenant General. "Observations on Gulf War Logistics." <u>Army Logistician</u>, September-October, pp. 5-11.
- Robinson, Tom. <u>Wartime Contingency Contracting Handbook</u>

 <u>Update.</u> <u>Gunter Air Force Base, AL: Air Force Logistics</u>

 <u>Management Center, 1992.</u>
- Telephone conversation with Lieutenant Colonel Gordon Kennedy, Joint Chiefs of Staff, Washington, DC. 30 November 1994.
- Telephone conversation with Lieutenant Colonel Steve Nash, U.S. Army Corps of Engineers, Washington, DC. 5
 December 1994.
- Telephone conversation with Lieutenant Colonel Chris Paparone, Defense Logistics Agency, Alexandria, Virginia. 30 November 1994.
- Tigges, Captain Jon B. and Captain Thomas J. Snyder. "Study of Air Force Theater-Based Contingency Contracting Training Requirements for a Power Projection Strategy." Unpublished Masters Thesis, Air Force Institute of Technology, WPAFB, Ohio: 1993.
- Toomey, Charles Major. "Base Development in Modern Contingency Operations: Can Active Army Engineers Meet the Task." Unpublished Research Paper, U.S. Army Command and General Staff College, School of Advanced Military Studies, Fort Leavenworth, KS: 1990.
- U.S. Atlantic Command. "LOGCAP Overview Brief." Briefing on LOGCAP usage in Haiti, Norfolk, VA: 1994.

- U.S. Army Combined Arms Command. Operations Restore Hope Lessons Learned Report. Fort Leavenworth, KS: Center For Army Lessons Learned, 1993.
- U.S. Army Corps of Engineers. "LOGCAP Briefing." Washington: 1994.
- U.S. Army 10th Mountain Division. "ARFOR After Action Report for Operation Restore Hope." Fort Drum, NY: 1993.
- U.S. Department of the Army. <u>Logistics Civil Augmentation</u>
 <u>Program (LOGCAP)</u>. Army Regulation 700-137. Washington:
 U.S. Department of the Army, 16 December 1985.
- U.S. Department of the Army. <u>Operations</u>. Field Manual 100-5. Washington: U.S. Department of the Army, June 1993.
- U.S. Department of the Army. Army Operational Logistics. Draft Field Manual 100-16. Washington: U.S. Department of the Army, 1993.
- U.S. Department of Defense. Department of Defense Dictionary of Military Terms. Joint Publication 1-02. Washington: Joint Chiefs of Staff, March 1994.
- U.S. Department of Defense. <u>Doctrine for Joint Operations</u>. Joint Publication 3-0. Washington: Joint Chiefs of Staff, 9 September 1993.
- U.S. Department of Defense. <u>Doctrine for Joint Operations in Low Intensity Conflict</u>. <u>Joint Publication 3-07</u>.

 Washington: <u>Joint Chiefs of Staff</u>, 15 December 1993.
- U.S. Department of Defense. <u>Doctrine for Logistics Support of Joint Operations</u>. Joint Publication 4-0. Washington: <u>Joint Chiefs of Staff</u>, September 1992.